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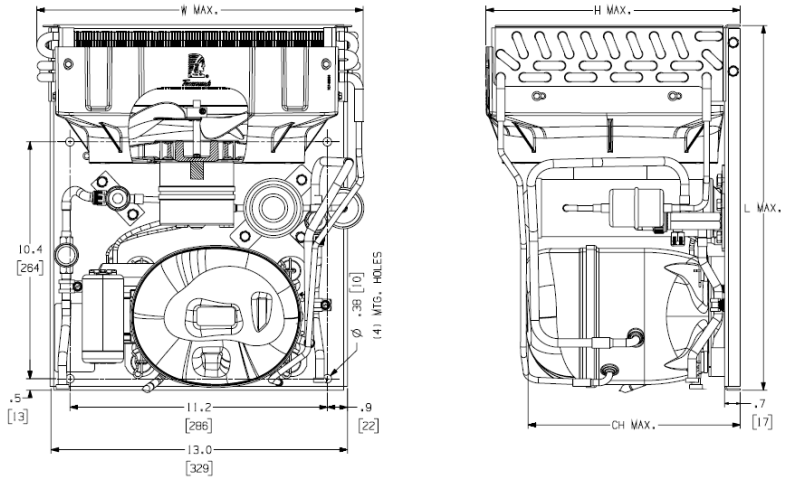
Celseon® Air Cooled Condensing Unit

Model: AE4450Y-AA1AD*

BoM: 2G224- **R-134a** **1/2 HP**



Model	Dimensions, inches				Line Connection*		Pumpdown	Air	Oil Ch	Gr. Wt.
	L	W	H	CH	Suction	Liquid	90 °F 90%	SCFM	Oz.	Lbs.
AE4450Y-AA1ADA	16.0	14.3	11.1	9.3	5/16” S	1/4” S	N/A	185	9.5	39
AE4450Y-AA1ADG					3/8” S	3/8” S	2.9 lbs			41
AE4450Y-AA1ADH					3/8” S	3/8” S	N/A			39
AE4450Y-AA1ADK					5/16” S	1/4” S				39
AE4450Y-AA1ADC					3/8” S	3/8” S	2.9 lbs			41
AE4450Y-AA1ADS					3/8” S	3/8” S	N/A			39
AE4450Y-AA1ADJ					3/8” S	3/8” S	2.9 lbs			41
AE4450Y-AA1ADP					3/8” S	3/8” S	2.9 lbs			41

* F = Flare, S = Solder, RF or RS = Rotolock with Flare or Solder Connections, C = Compression Fitting

Factory charge: 20 PSIG Nitrogen – **MUST BE EVACUATED**

		Ambient Temperatures											
Evaporator T,		80°F			90°F			100°F			110°F		
°F	PSIG	BTUH	Watts	Cond T	BTUH	Watts	Cond T	BTUH	Watts	Cond T	BTUH	Watts	Cond T
5	9.0	2315	416	96	2124	456	105	1938	495	114	1760	535	123
10	11.9	2620	440	98	2406	478	107	2200	516	116	2000	555	125
15	15.0	2943	466	100	2706	503	109	2477	540	119	2255	577	127
20	18.4	3282	495	103	3021	531	112	2768	566	121	2523	602	130
25	22.1	3757	537	105	3475	572	114	3200	607	123	2933	642	132
30	26.1	4138	572	108	3830	606	116	3530	640	125	3238	673	134
35	30.4	4538	610	110	4194	642	119	3868	675	128	3551	707	136
40	35.0	4925	650	113	4565	681	122	4213	713	130	3870	744	139
45	40.1	5327	693	116	4940	723	124	4561	753	133	4191	783	141

60 Hz Performance

Return gas temp 40°F below 20°F evaporator,
and 65°F above 20° evap, 5°F sub cooling

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Specifications/ Parts:

Unit Model	**AE4450Y-AA1ADA**
Unit Bill of Material	**2G224-09**
Refrigeration Range	5° F to 45° F
Design Pressure Low	150
Design Pressure High	450
Nominal Volts-Hz-Ph	115-60-1
Voltage Range	103-127
Min. Circuit Ampacity	10.5
Max. Fuse Size (amps)	15
Compressor Model	AE4450Y-AA1A
Comp. Bill of Material	AE-1154-E
Compressor RLA/LRA	8.1/42
Overload	External
Relay	820-10078
Run Capacitor	N/A
Run Capacitor Rating	N/A
Start Capacitor	85PS165E16
Start Capacitor Rating	324-389 MFD 165V
Fan Motor	810-10001
Fan Motor RLA	.38
Fan Blade	515-10002
Fan Shroud/Guard Combo	707-00004
Condenser	506-10035
Unit Drawing	DGU1972-02
Wiring Diagram	91266-01
Replacement Kit: Relay	K71-41
Replacement Kit: O/L	K90-61

Unit Model	**AE4450Y-AA1ADG**
Unit Bill of Material	**2G224-19**
Receiver Tank	510-10000
Liquid Valve	56659
Suction Valve	56659
Unit Model	**AE4450Y-AA1ADH**
Unit Bill of Material	**2G224-29**
Liquid Valve	56659
Suction Valve	56659
Unit Model	**AE4450Y-AA1ADK**
Unit Bill of Material	**2G224-39**
Power Cord	85106-14
Unit Model	**AE4450Y-AA1ADC**
Unit Bill of Material	**2G224-59**
Receiver Tank	510-10000
Liquid Valve	56659
Suction Valve	56659
Power Cord	85106-14
Unit Model	**AE4450Y-AA1ADS**
Unit Bill of Material	**2G224-69**
Liquid Valve	56659
Suction Valve	56659
Power Cord	85106-14
Unit Model	**AE4450Y-AA1ADJ**
Unit Bill of Material	**2G224-79**
Receiver Tank	510-10000
Liquid Valve	56659
Suction Valve	56659
Filter Drier	71116
Sight Glass	70084
Unit Model	**AE4450Y-AA1ADP**
Unit Bill of Material	**2G224-89**
Receiver Tank	510-10000
Liquid Valve	56659
Suction Valve	56659
Power Cord	85106-14
Filter Drier	71116
Sight Glass	70084

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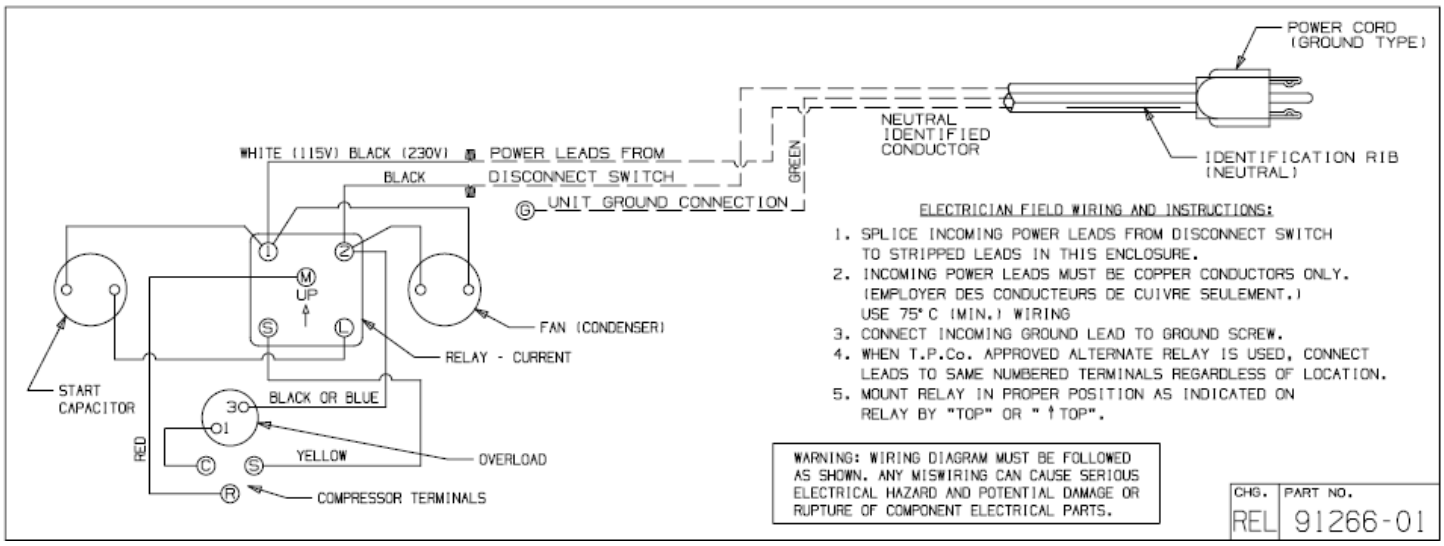
Electrical Diagram Page 3


POWER CORD
(GROUND TYPE)
NEUTRAL
IDENTIFIED
CONDUCTOR
IDENTIFICATION RIB
(NEUTRAL)
WHITE (115V) BLACK (230V)
POWER LEADS FROM
BLACK
DISCONNECT SWITCH
GREEN
UNIT GROUND CONNECTION
UP
FAN (CONDENSER)
RELAY - CURRENT
START
CAPACITOR
BLACK OR BLUE
RED
YELLOW
OVERLOAD
COMPRESSOR TERMINALS
ELECTRICIAN FIELD WIRING AND INSTRUCTIONS:
1. SPLICE INCOMING POWER LEADS FROM DISCONNECT SWITCH TO STRIPPED LEADS IN THIS ENCLOSURE.
2. INCOMING POWER LEADS MUST BE COPPER CONDUCTORS ONLY. (EMPLOYER DES CONDUCTEURS DE CUIVRE SEULEMENT.) USE 75° C (MIN.) WIRING
3. CONNECT INCOMING GROUND LEAD TO GROUND SCREW.
4. WHEN T.P.Co. APPROVED ALTERNATE RELAY IS USED, CONNECT LEADS TO SAME NUMBERED TERMINALS REGARDLESS OF LOCATION.
5. MOUNT RELAY IN PROPER POSITION AS INDICATED ON RELAY BY "TOP" OR "↑TOP".
WARNING: WIRING DIAGRAM MUST BE FOLLOWED AS SHOWN. ANY MISWIRING CAN CAUSE SERIOUS ELECTRICAL HAZARD AND POTENTIAL DAMAGE OR RUPTURE OF COMPONENT ELECTRICAL PARTS.
CHG.
PART NO.
REL
91266-01